

→ 12PS/TP
to amend the specification
as per examiner's comment.

NON-PEPTIDE GLP-1 AGONISTS

FIELD OF THE INVENTION

5 The present invention relates to novel non-peptide GLP-1 agonists, pharmaceutical compositions comprising them, use of the non-peptide GLP-1 agonists for the preparation of pharmaceutical compositions and methods for the treatment and/or prevention of disorders and diseases wherein an activation of the human GLP-1 receptor is beneficial, especially metabolic disorders such as IGT (impaired glucose tolerance), Type 1 diabetes, Type 2
10 diabetes and obesity.

BACKGROUND OF THE INVENTION

15 GLP-1 (glucagon like peptide-1) is a 30 amino acid long peptide hormone secreted by the L-cells in the intestine.

GLP-1 consists of two native forms, GLP-1 (7-36) and GLP-1 (7-37), of the following amino acid sequences:

20 7 8 9 10 11 12 13 14 15 16 17
 His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-

 18 19 20 21 22 23 24 25 26 27 28
 Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu-Phe-

25 29 30 31 32 33 34 35 36
 Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg-X

wherein X is NH₂ for GLP-1(7-36) and Gly for GLP-1(7-37).

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GLP-1 is a so-called incretin and its primary mechanisms of actions are to:

- Stimulate insulin secretion in a physiological and glucose-dependent manner
- Decrease glucagon secretion
- Inhibit gastric emptying